

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1-22 are pending.

I. Rejections under 35 U.S.C. § 103

Ishii in view of JP '667

In the Office Action, at page 2, claims 1, 2, 4, 5, 7, 16 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,309,249 to Ishii in view of Japanese Patent No. 59042667. This rejection is respectfully traversed because the combination of Ishii and JP '667 does not suggest:

determining a type of an optical disc loaded into a tray; and
transmitting a predetermined signal based on the determination result to a laser emitting diode module...[that] emits a color beam in accordance with the determined type of the optical disc,

as recited in independent claim 1.

a system controller...to determine a type of the optical disc from an optical signal received via the optical pickup...; and

a laser emitting diode module connected to the system controller, including at least two laser emitting diodes, which emit different color beams so that the system controller drives the laser emitting diode module to emit a color beam in accordance with the determined type of the optical disc,

as recited in independent claims 4 and 22.

determining a type of an optical disc loaded into a tray; and
transmitting a predetermined signal based on the determination result to a laser emitting diode module; and
emitting a light beam in accordance with the determined type of the optical disc,

as recited in independent claim 7.

As a non-limiting example, the present invention of claim 1, for example, is directed to a method to display a status of an optical recording and/or reproducing apparatus. A type of an optical disc loaded into a tray is determined. A predetermined signal based on the determination result is then transmitted to a laser emitting diode module having at least two laser emitting

diodes, which emit different color beams so that the laser emitting diode module emits a color beam in accordance with the determined type of the optical disc.

Ishii discusses an optical disc reproducing apparatus in which the type of the optical disc 2 is discriminated by a disc type discriminating device. The loaded optical disc 2 is checked whether the disc 2 is a CD-DA disc or a CD-I disc, and as a result of the determination, the control causes a display to be made for the case in which the loaded optical disc 2 is the CD-DA disc or the CD-I disc, as appropriate. Different displays are shown on the X-Y device 71 and the trigger buttons 72, 73 of a pointing device 74, based on the determination.

The Examiner concedes that Ishii does not discuss or suggest a laser emitting diode module emitting different color beams, but indicates that JP '667 makes up for the deficiency in Ishii, alleging that "[i]t would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the diodes of [JP '667] such that they included different colors representing the different types of disk, as taught by [JP '667], since such a modification would more clearly inform the operator of the type of disk inserted and operation mode desired, thereby reducing the possible of errors during operation [sic]". The Applicant respectfully disagrees.

JP '667 discusses a disk driving device in which a luminous color of a display element having two or more luminous colors whose colors are different are able to be switched, thereby informing an operator of contents to be displayed, based on the switched color. JP '667 discusses that the display LED 19 is lighted in blue when the A surface of the disk is used and lighted in red when the B surface of the disk is used. JP '667 does not discuss or suggest that the display LED 19 emits a color beam in accordance with a determined type of the optical disc.

The combination of Ishii and JP '667 is not suggestive of a laser emitting diode module including at least two laser emitting diodes, which emit different color beams so that the laser emitting diode module emits a color beam in accordance with the determined type of the optical disc. Ishii discusses only making a determination as to different types of optical discs and displaying specific display patterns based upon the determined type of disc. JP '667 is only concerned with detecting which side of the disc is being used. The combination of Ishii and JP '667 does not suggest emitting different color beams in accordance with a determined type of optical disc to one of ordinary skill in the art.

Further, the motivation cited that "such a modification would more clearly inform the operator of the type of disk inserted and operation mode desired" is not adequate to suggest combining the reproducing apparatus of Ishii with the disk driving device of JP '667. Specifically, that the operator would be informed of a type of disk inserted is not enough to motive one of

ordinary skill in the art to combine the optical disc discriminating function of Ishii with the different color displays of JP '667 to suggest determining a type of optical disc and emitting different color beams based on the determined disc. Specifically, in asserting an obviousness rejection, the Examiner "...must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). M.P.E.P. § 706.02(j). Here, it is unclear as to how a motivation of informing the operator of the type of disk inserted would provide the requisite motivation to meet the "preponderance of evidence" standard – that the Examiner must provide evidence which shows that the reference teachings establish a *prima facie* case of obviousness is more probable than not. Merely alleging that the operator would be more clearly informed of the type of disk inserted does not suggest why one of ordinary skill would be motivated to combine a disc discriminating device which changes display patterns with a device that distinguishes which side of the disc is being used by color.

Therefore, as the combination of the teachings of Ishii and JP '667 does not suggest "determining a type of an optical disc loaded into a tray; and transmitting a predetermined signal based on the determination result to a laser emitting diode module...[that] emits a color beam in accordance with the determined type of the optical disc," as recited in independent claim 1, the combination of the teachings of Ishii and JP '667 does not suggest "a system controller...to determine a type of the optical disc from an optical signal received via the optical pickup...; and a laser emitting diode module connected to the system controller, including at least two laser emitting diodes, which emit different color beams so that the system controller drives the laser emitting diode module to emit a color beam in accordance with the determined type of the optical disc," as recited in independent claims 4 and 22, and the combination of the teachings of Ishii and JP '667 does not suggest "determining a type of an optical disc loaded into a tray; and transmitting a predetermined signal based on the determination result to a laser emitting diode module; and emitting a light beam in accordance with the determined type of the optical disc," as recited in independent claim 7, claims 1, 4, 7 and 22 patentably distinguish over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Claims 2, 5 and 16 depend either directly or indirectly from independent claims 1 and 4 and include all the features of their respective claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 2 recites "driving the laser emitting diode module so that an emission mode of the laser emitting diode module is changed based on which operation is performed on the optical disc." Therefore, claims 2, 5 and 16 patentably distinguish over the references relied upon for at least the reasons noted above.

Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Ishii in view of JP '667 and further in view of common knowledge or Tsuchiya

In the Office Action, at pages 3 and 4, claims 3, 6 and 8-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishii in view of JP '667 and further in view of common knowledge in the art or U.S. Patent No. 6,201,777 to Tsuchiya et al. This rejection is respectfully traversed.

As discussed above with respect to independent claims 1 and 4, from which claims 3, 6 and 8-15 ultimately depend, the combination of the teachings of Ishii and JP '667 does not suggest all the features of claims 1 and 4. Common knowledge and Tsuchiya do not make up for the deficiencies in the combination of the teachings of Ishii and JP '667. Claims 3, 6 and 8-15 depend either directly or indirectly on independent claims 1 and 4 and include all the features of their respective claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 9 recites that "the system controller compares a time interval between the surface reflection signal and the S-Curve signal detected by the radio frequency amplifier with a predetermined reference value." Therefore, claims 3, 6 and 8-15 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

II. Allowable Subject Matter

Applicants are appreciative of the indication that claims 17-21, which are objected to, would be allowable if rewritten in independent form. As the Applicant believes independent claim 4, from which claims 17-21 ultimately depend, to be in condition for allowance, claims 17-21 have not been rewritten in independent form.

Conclusion

In accordance with the foregoing, claims 1-22 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

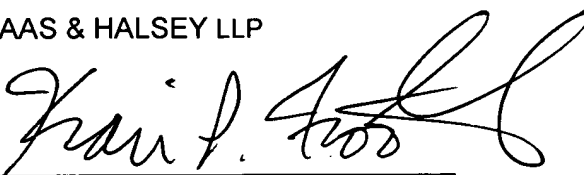
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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